Minutes of the LCLS BLM Simulations Working Group
March 12, 2008
Attendees—Argonne: W. Berg, J. Dooling /SLAC: A. Fasso, H.-D. Nuhn, M. Santana

MS—Regarding FLUKA simulation results included in the 20080220 WG minutes, the energy spectrum is the result of a beam of electrons striking the radiator material (quartz). The events are biased for Cerenkov photon emission. It was requested that ANL provide material properties for the radiator. WB said he would take this request as an action item.

JD reviewed briefly a rough estimate he did with Bingxin Yang calculating PMT output current generated by 1-nC of 13.64 GeV electrons striking a 1-micron Al foil, 85-m upstream at of the first undulator. Input was taken from MARS SPE electron spectrum in the radiator. He asked the other WG members present to review the estimate.

Some confusion was expressed regarding the meaning of diffusion in FLUKA. MS asked everyone to review the discussion in the FLUKA manual.

HDN was surprised by the rather large error bars present in the MARS SPE simulation data (electron spectra in the radiator); no biasing is being used to enhance the signals.

The next meeting of the WG is scheduled for March 19, 2008, 4:00 PM CDT. JD has requested that the meeting time be changed; will discuss this again at the next meeting.

JCD